

Mini-ITX / MicroATX-compatible Form Factor

Intel® Desktop Board DG41MJ Classic Series

A mainstream technology that not only provides you with a space-saving solution but also meets your daily computing needs

Speed and Performance are the Ingredients that Enable Efficient Computing.

- Supports a wide range of the latest Intel® 45nm processors, including the new Intel® Core™2 Quad** and Intel® Core™2 Duo** processors.
- Delivers up to 8 GB¹ support for DDR2 800 / 667 SDRAM memory.

Bring Home the New Generation of Graphics Capabilities. Turning Your PC into a Multifunctional Work and Entertainment Machine.

- Intel® Graphics Media Accelerator X4500 with Intel® Clear Video Technology.
- Supports DirectX* 10, which enhances your gaming experience.
- Enjoy smoother high-definition video thanks to built-in hardware video decode acceleration (full hardware acceleration decode on MPEG-2 and partial on VC1 and AVC/H.264).

- VGA and DVI-D graphics output with dual display capability.

Flexibility Creates More Possibilities and a Comfortable and Effective Way to Get Going.

The Intel® Desktop Board DG41MJ offers legacy and premium features to meet a variety of digital needs.

- Great network connectivity with integrated 10/100/1000 network connection.
- Rich sound quality of Intel® High Definition Audio with 5.1 surround sound.
- Parallel port, PCI connector, and serial port header onboard to meet the bare necessities.
- Microsoft* Windows Vista* Premium WHQL certified.



Intel® Desktop Board DG41MJ



The boxed Intel® Desktop Board DG41MJ solution includes:

- ATX 2.2 compliant I/O shield
- SATA and Slimline SATA Cables
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Microsoft* Windows Vista* Premium WHQL certified

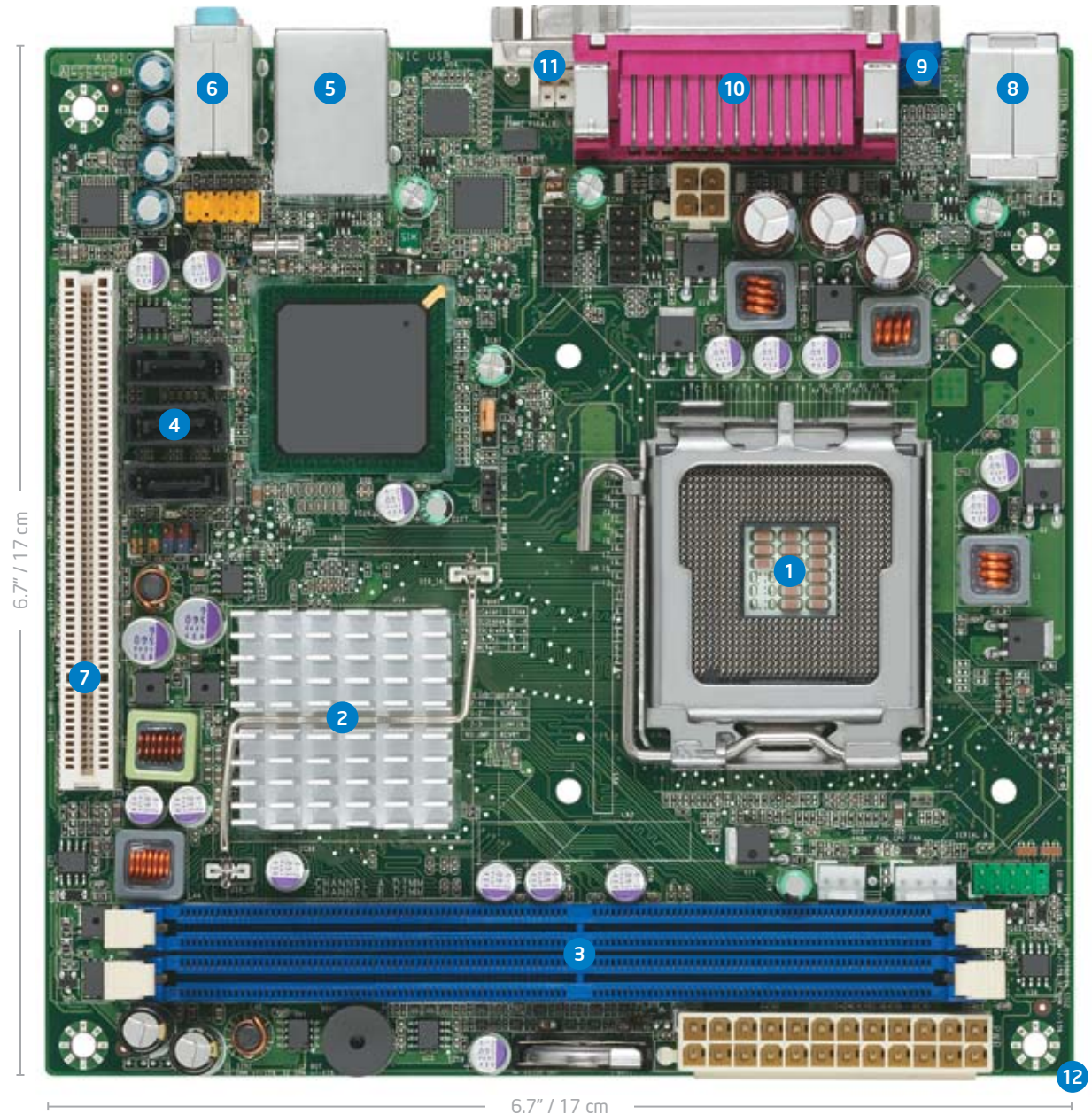
The takeaway software included with the Intel® Desktop Board DG41MJ works best for your everyday computing.

CAPABILITY	SOFTWARE INCLUDED:
Productivity	<ul style="list-style-type: none">▪ Intel® Integrator Assistant (Internet Download)▪ Diskeeper* Home Edition▪ Laplink* PCmover* Express▪ Skype*▪ TypePad*▪ Kingsoft* Powerword* (Chinese)
Data Protection / Manageability	<ul style="list-style-type: none">▪ Intel® Platform Administration Technology▪ Acronis* True Image OEM
Entertainment	<ul style="list-style-type: none">▪ DivX* for Windows*▪ WildTangent*
Antivirus	<ul style="list-style-type: none">▪ Norton Internet Security*▪ Kaspersky* Anti-Virus (Russian)▪ Kingsoft* Antivirus (Chinese)

Features and Benefits

Intel® Desktop Board DG41MJ

- 1 Support for the Intel® Core™2 Quad** and Intel® Core™2 Duo** processors:** Features quad-core and dual-core processing with 1333 / 1066 / 800 MHz system bus in the LGA775 package.
- 2 Intel® G41 Express Chipset featuring Intel® Graphics Media Accelerator X4500**
- 3 Dual-Channel DDR2 800 / 667 memory support:** Two DIMM sockets, designed to support up to 8 GB¹ of DDR2 800 / 667 SDRAM memory, delivering greater platform performance and flexible memory support.
- 4 Three Serial ATA ports (3.0 Gb/s):** Facilitates high-speed storage and data transfers at up to 3.0 Gb/s for each of four ports.
- 5 Integrated 10/100/1000 Network Connection:** Features onboard 10/100/1000 Mb/s Ethernet LAN connectivity.
- 6 Intel® High Definition Audio with 5.1 surround sound:** Enables high-quality integrated audio that rivals the performance of high-end discrete audio solutions.
- 7 One PCI connector:** Provides expansion slot for custom system configurations and future add-in card upgrades.
- 8 Eight Hi-Speed USB 2.0 ports:** Provides four back panel ports and an additional four USB ports via two internal headers.
- 9 VGA port**
- 10 Parallel port header:** Legacy device compatibility.
- 11 DVI-D:** Built-in HDCP support enables viewing of protected HD Video multimedia content.
- 12 Mini-ITX / MicroATX-compatible form factor**



Technical Specifications

Processor

Processor Support

- Intel® Core™2 Quad** processor (up to 65 W TDP) in the LGA775 package
- Intel® Core™2 Duo** processor (up to 65 W TDP) in the LGA775 package
- Intel® Pentium® processor in the LGA775 package
- Intel® Celeron® processor in the LGA775 package
- Supports Intel® 64 Architecture²

Chipset

Intel® G41 Express Chipset

- Intel® 82G41 Graphics and Memory Controller Hub (GMCH)
- Intel® 82801GB I/O Controller Hub (ICH7)

Graphics Memory Controller Hub (GMCH)

- Designed to support up to 8 GB¹ of system memory using DDR2 800 / 667 SDRAM memory
- Intel® Fast Memory Access
- Intel® Graphics Media Accelerator X4500 with Intel® Clear Video Technology

Intel® I/O Controller Hub (ICH)

- Three SATA (3.0 Gb/s) ports
- Integrated 10/100/1000 network connection
- Eight Hi-Speed USB 2.0 ports (four back panel ports and an additional four USB ports via two internal headers)

System BIOS

- 8 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V2.0b, DMI 2.0, multilingual support
- Serial Peripheral Interface (SPI) Flash

System Memory

Memory Capacity

- Two 240-pin DIMM connectors supporting up to two double-sided DIMMs

Memory Types

- DDR2 800 / 667 SDRAM memory support
- Non-ECC Memory

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- 1.8 V

Hardware Management Features

- Processor fan speed control
- System chassis fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- Power management support for ACPI 1.0b

Expansion Capabilities

- One PCI bus add-in card connectors

Headers

- One serial port header

Jumpers and Front-Panel Connectors

Jumpers

- Single configuration jumper design
- Jumper access for BIOS maintenance mode

Front-Panel Connectors

- Reset, HDD LED, Power LEDs, power on/off
- Two front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header

Mechanical

Board Style

- ATX 2.2-compliant

Board Size

- 6.7" x 6.7" (17 cm x 17 cm)

Baseboard Power Requirements

- ATX12V

Environment

Operating Temperature

- 0° C to +55° C

Storage Temperature

- 20° C to +70° C

Regulations and Safety Standards

United States and Canada

- CSA/UL 60950-1, First Edition (Binational Standard)

Europe

- (Low Voltage Directive 2006/95/EC) EN 60950-1:2006

International

- IEC 60950-1:2001, First Edition

EMC Regulations

(tested in representative chassis)

United States

- FCC 47 CFR Part 15, Subpart B

Canada

- ICES-003 Class B

Europe

- (EMC Directive 2004/108/EC) EN 55022:2006 and EN 55024:1998

Australia/New Zealand

- EN 55022:2006 Class B

Japan

- VCCI V-3/04.04, V-4/03.04, Class B

South Korea

- KN-22:2005 and KN-24:2005

Taiwan

- CNS 13438:2006 Class B

International

- CISPR 22:2005 +A1:2005 +A2:2006 Class B

Environmental Compliance

Europe

- Europe RoHS (Directive 2002/95/EC)

China

- China RoHS (MII Order # 39)



Lead-Free: The symbol is used to identify electrical and electronic assemblies and components in which the lead (Pb) concentration level in any of the raw materials and the end product is not greater than 0.1% by weight (1000 ppm). This symbol is also used to indicate conformance to lead-free requirements and definitions adopted under the European Union's Restriction on Hazardous Substances (RoHS) directive, 2002/95/EC.

Ordering Information: See the Intel Web site at www.intel.com. For the most current product information, visit developer.intel.com/products/desktop/motherboard/

¹ System resources and hardware (such as PCI and PCI Express*) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.

² 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See <http://developer.intel.com/technology/intel64/index.htm> for more information.

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** Supports 65 W Thermal Design Power, Intel® Core™2 Quad and Intel® Core™2 Duo processors with 1333 / 1066 MHz system bus. For information, visit processormatch.intel.com

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